

Amendments to the Claims

B3
1. (currently amended) A process to isolate a neurotrophin homologue from a mixture containing ~~other proteins and~~ variants of that said neurotrophin homologue, wherein the process comprises: a) purifying a neurotrophin mixture; a b) loading the mixture containing the neurotrophin onto a hydrophobic interaction chromatography resin; ~~b c)~~ eluting the neurotrophin homologue from the resin with an elution buffer under conditions in which the neurotrophin homologue separates from the variant; and ~~c d)~~ collecting the neurotrophin homologue.

B4
2. (new) The process of claim 1, wherein said purifying comprises affinity chromatography.

3. (new) The process of claim 1, wherein said purifying comprises purifying with chromatography on silica.

4. (new) The process of claim 1, wherein said purifying comprises purifying with chromatography on heparin Sepharose

5. (new) The process of claim 1, wherein said purifying comprises purifying with chromatography on an anion exchange resin.

6. (new) The process of claim 1, wherein said purifying comprises purifying with chromatography on a cation exchange resin.

7. (new) The process of claim 1, wherein said purifying comprises purifying with chromatofocusing.

8. (new) The process of claim 1, wherein said purification comprises purifying with preparative SDS-PAGE.

9. (new) The process of claim 6, wherein said cation exchange resin comprises a polyaspartic acid column.

10. (new) The process of claim 1, wherein the resin comprises a phenyl functional group.

11. (new) The process of claim 10, wherein the resin is a sulphopropyl sepharose high performance (SP-Sepharose HP), poly aspartic acid resin, polysulfoethyl cation exchange resin, or sulfoisobutyl (SO₃) resin.

12. (new) The process of claim 10, further comprising the step of separating the neurotrophin from a misfolded variant of that neurotrophin using preparative reversed-phase liquid chromatography resin.

13. (new) The process of claim 12, wherein the resin contains a carbon at position 4 (C4) functional group.

14. (new) A composition prepared by the method of claim 1 comprising a neurotrophin.

15. (new) A composition prepared by the method of claim 1 comprising a mixture of neurotrophins.

16. (new) The composition of claim 15 wherein said mixture of neurotrophins comprises NGF and at least one other neurotrophin.

17. (new) The composition of claim 15 wherein said mixture of neurotrophins comprises at least two neurotrophins selected from the group consisting of NGF, NT-4/5, NT-3, BDNF, and homologs thereof.

18. (new) The process of claim 1, wherein said loading of said mixture comprises loading a mixture having a volume of at least about 700 mL onto a hydrophobic interaction chromatography resin.

19. (new) The process of claim 1, wherein said loading of said mixture comprises loading a mixture having a volume of at least about 1200 mL onto a hydrophobic interaction chromatography resin.

20. (new) A process to isolate a neurotrophin from a mixture containing variants of said neurotrophin, wherein the process comprises: a) purifying a neurotrophin mixture prepared from cells; b) loading the mixture containing the neurotrophin onto a hydrophobic interaction chromatography resin; and c) eluting the

B4
Conclude neurotrophin from the resin with an elution buffer under conditions in which the
neurotrophin separates from the variant.
